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## REMARKS

Applicants acknowledge the Examiner's review of the specification, claims, and drawings. In light of the above amendments and following remarks, Applicants respectfully requests reconsideration of the present application. No new matter has been entered.

## STATUS OF THE CLAIMS:

Claims 130-133, 135-151, 153-164, 166-184, 251, and 252 are presently pending in the application. Claims 1-129, 134, 152, and 185-250 were previously canceled. Claim 165 has been cancelled herein.

## CLAIM REJECTIONS UNDER 35 U.S.C. § 103:

The Examiner rejects Claims 130-133, 135-138, 153-159, 163, 164, 167-171, 178, and 252 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,671,996 to Bos et al. in view of National Semiconductor (LM78S40) Universal Switching Regulator Subsystem Data Sheet.

Applicants respectfully traverse. Notwithstanding, Applicants have amended Claim 130 to more clearly define Applicants invention which now calls for:

An improved lighting system for a vehicle, the vehicle having a battery/ignition voltage, said lighting system comprising:

an accessory module assembly adapted for attachment to an interior portion of a vehicle;

said accessory module assembly comprising a unitary light module;

said unitary light module comprising a housing and at least one chosen from a reflector, a lens, and a heat dissipation element;

said unitary light module further comprising a single high-current high-intensity power light emitting diode, said

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single high-current high-intensity power light emitting diode housed by said housing of said unitary light module;

said unitary light module of said accessory module assembly configured to illuminate an area inside the vehicle when said accessory module assembly is attached to said interior portion of the vehicle and when said single high-current high-intensity power light emitting diode is electrically powered;

said single high-current high-intensity power light emitting diode delivering a luminous efficiency of at least about 1 lumen/watt when operated at a forward current of at least about 100 milliamps and a forward operating voltage less than about 5 volts;

said unitary light module further comprising a voltage conversion element operable to step-down an input voltage and to step-up an input current, said voltage conversion element having an output voltage and an output current whereby the ratio of said input voltage of said voltage conversion element to said output voltage of said voltage conversion element is at least about 2 to 1 and wherein the ratio of said input current of said voltage conversion element to said output current of said voltage conversion element is at least about 1 to 2; and

said voltage conversion element providing said outputs to said single high-current high-intensity power light emitting diode whereby said output current is at least about 100 milliamps and said output voltage is less than about 5 volts.

Applicants respectfully urge that neither Bos nor the National Semiconductor Universal Switching Regulator Subsystem Data Sheet (hereinafter as the NSUSRS Data Sheet) alone or in combination discloses or suggests, for example, a lighting system for a vehicle that includes a unitary light module with a housing and with at least one reflector, lens, or heat dissipation element wherein the unitary light module includes a single high-current high-intensity power light emitting diode that is housed by the housing and, further, with the unitary light module further comprising a voltage conversion element which steps down an input voltage and steps up an input current, as called for in the claim. Therefore, Applicants respectfully urge

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that Claim 130 is patentably distinguishable over Bos in view of the NSUSRS Data Sheet alone or in combination with any other reference of record.

Claims 131-133 depend from amended Claim 130 and, thus, incorporate the same limitations as amended Claim 130. Accordingly, Claims 131-133 are patentably distinguishable over Bos in view the NSUSRS Data Sheet alone or in combination for at least the reasons set forth above.

With reference to Claim 135, Claim 135 calls for the ratio of the input voltage to the output voltage of the voltage conversion element to be at least about 4 to 1. As noted above, Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests the claimed combination for at least the reasons set forth above in reference to Claim 130. Further, Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet discloses or suggests the further combination of the unitary light module comprising a voltage conversion element with an input voltage to output voltage of the voltage conversion element being at least about 4 to 1.

With respect to Claim 136, Claim 136 depends from amended Claim 130 and further calls for the ratio of the input voltage to the output voltage of the voltage conversion element to be at least about 6 to 1.

Applicants respectfully urge that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests, for example, a unitary light module as called for in the claims with the unitary light module further comprising a voltage conversion element with a ratio of the input voltage to the output voltage in a range of at least about 6 to 1.

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With respect to Claim 137, Claim 137 depends from amended Claim 130.

Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module including a housing and at least a reflector, lens, or heat dissipation element and a single high-current high-intensity power light emitting diode which emits about 1 lumen, with the light emitting diode housed by the housing of the unitary light module in combination with the unitary light module comprising a voltage conversion element, as called for in the claims.

With respect to Claim 138, Claim 138 depends from amended Claim 130.

Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module including a housing and at least a reflector, a lens, or a heat dissipation element and a single high-current high-intensity power light emitting diode which emits about 5 lumens, with the diode housed by the housing of the unitary light module in combination with the unitary light module comprising a voltage conversion element, as called for in the claims.

With respect to Claims 153 and 154, Claims 153 and 154 depend from amended Claim 130 and thus incorporate the same limitations as amended Claim 130. Applicants respectfully urge that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests the unitary light module as called for in the claims with the further combination of the output voltage being at least about 2 volts ( Claim 153) and the output voltage being in a range from about 2 to about 5 volts (Claim 154).

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With respect to Claims 155-157, Claims 155-157 depend from amended Claim 130 and thus incorporate the same limitations as amended Claim 130. Applicants respectfully urge that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests the unitary light module as called for in the claims with the further combination of the light emitting diode operating at an operational voltage that is less than about 50% of the battery/ignition voltage of the vehicle ( Claim 155), the light emitting diode operating at an operational voltage that is less than about 35% of the battery/ignition voltage (Claim 156), or the light emitting diode operating at an operational voltage that is less than about 20% of the battery/ignition voltage (Claim 157).

With respect to Claims 158 and 159, Claims 158 and 159 depend from Claim 155 and ultimately from amended Claim 130 and thus incorporate the same limitations as Claim 155 and amended Claim 130. Applicants respectfully urge that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests the unitary light module as called for in the claims with the further combination of the battery/ignition voltage being about 12 volts nominal (Claim 158) or the battery/ignition voltage being about 12 volts nominal to 42 volts nominal (Claim 159).

Claim 252 depends from Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully urge that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests the unitary light module as called for in the claims with the further combination of a power resistor in series with said single high-current high intensity light emitting diode.

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With respect to Claim 163, Claim 163 depends from Claim 252 and ultimately from Claim 130 and thus incorporate the same limitations as Claim 252 and amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the accessory module assembly including the power resistor.

With respect to Claim 164, Claim 164 depends from Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the accessory module assembly including the voltage conversion element.

With respect to Claim 167, Claim 167 depends from Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the accessory module assembly comprising a removable light assembly.

With respect to Claim 168, Claim 168 depends from Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of a mirror assembly with the accessory module assembly located at the mirror assembly.



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With respect to Claim 169, Claim 169 depends from Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the unitary light module including the said lens, and with light from the single high-current high-intensity power light emitting diode passing through the lens.

Claims 170 and 171 depend from Claim 169 and amended Claim 130 and thus incorporate the same limitations as Claim 169 and amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the lens comprising a diffractive optical element or a refractive optical element (Claim 170) or the lens comprising a fresnel-optic lens, a binary-optic lens, a diffusive-optic lens, a holographic-optic lens, or a sinusoidal-optic lens (Claim 171).

With respect to Claim 178, Claim 178 depends from Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the unitary light module including the voltage conversion element.

The Examiner rejects Claims 139-151, 160-162, 165, 166, 172-177, 179-184, and 251 under 35 U.S.C. § 103(a) as being obvious over Bos in view of NSUSRS Data Sheet and, further, in view of U.S. Patent No. 3,676,668 to Collins.

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With respect to Claim 139, Claim 139 depends from amended Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that neither Bos nor the NSUSRS Data Sheet nor Collins alone or in combination discloses or suggests the claimed combination. For example, even when combined, the references do not disclose or suggest a unitary light module comprising a housing and at least one of a reflector, a lens, or a heat dissipation element with the unitary light module further comprising a single high-current high-intensity power light emitting diode which is housed by the housing of the unitary light module and, further, with the unitary light module further comprising a voltage conversion element and with the single high-current high-intensity power light emitting diode emitting at least about 10 lumens.

With respect to Claim 251, Claim 251 depends from amended Claim 130 and thus incorporates the same limitations as amended Claim 130. Further, Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests the combination of a unitary light module comprising a housing and at least a reflector, a lens, or a heat dissipation element with the unitary light module further comprising a single high-current high-intensity power light emitting diode which is housed by the housing of the unitary light module and, further, with the unitary light module further comprising a voltage conversion element and wherein the unitary light module comprises a heat dissipation element adapted to dissipate heat from the single high-current high-intensity power light emitting diode.

With respect to Claim 140, Claim 140 depends from Claim 251 and ultimately from amended Claim 130 and thus incorporates the same limitations as amended Claim 130.



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Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests the claimed combination. For example, none of Bos, the NSUSRS Data Sheet, or Collins discloses or suggests a light module comprising a housing and at least a reflector, a lens, or a heat dissipation element, with the unitary light module further comprising a single high-current high-intensity power light emitting diode, which is housed by the housing, with the unitary light module further comprising a voltage conversion element and wherein the unitary light module comprises a heat dissipation element, which is adapted to dissipate heat from the single high-current high-intensity power light emitting diode and which includes a reflective surface for reflecting light emitted by the light emitting diode.

With respect to Claim 141, Claim 141 depends from Claim 140 and ultimately depends from amended Claim 130 and further calls for a light directing element, which directs light emitted from the light emitting diode toward the area of the vehicle. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests the claimed combination. For example, none of the references disclose or suggest a unitary light module comprising a housing and at least a reflector, a lens, or a heat dissipation element, and further comprising a single high-current, high-intensity power light emitting diode, which is housed by the housing in combination with the unitary light module further comprising a voltage conversion element in combination with the heat dissipation element including a reflective surface for reflecting light emitted by the single high-current high-intensity power light emitting diode and a light directing element, which directs light emitted from the light emitting diode toward the area of the vehicle.

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With respect to Claim 142, Claim 142 depends from Claim 251 and ultimately from amended Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a light module comprising a housing and at least a reflector, a lens, or a heat dissipation element, with the unitary light module further comprising a single high-current high-intensity power light emitting diode, which is housed by the housing, with the unitary light module further comprising a voltage conversion element and wherein the unitary light module comprises a heat dissipation element, which is adapted to dissipate heat from the light emitting diode and which comprises a heat sink.

With respect to Claims 143-144, Claims 143 and 144 depend from Claim 142 and ultimately from amended Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that Claims 143 and 144 are patentably distinguishable over Bos, the NSUSRS Data Sheet and Collins alone or in combination with any other reference of record for at least the reasons set forth above in reference to Claims 130 and 142.

With respect to Claim 145, Claim 145 depends from Claim 144 and ultimately from amended Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that Claims 143 and 144 are patentably distinguishable over Bos, the NSUSRS Data Sheet and Collins for at least the reasons set forth above in reference to Claims 130 and 142. Further, Claim 145 calls for the heat to include a plurality of fins. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in

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combination discloses or suggests a light module as called for the claims with the unitary light module having a plurality fins.

With regard to Claims 146 and 147, Claims 146 and 147 depend from Claim 142 and ultimately from amended Claim 130 and thus incorporate the same limitations as amended Claim 130. Applicants respectfully submit that Claims 143 and 144 are patentably distinguishable over Bos, the NSUSRS Data Sheet and Collins alone or in combination with any other reference of record for at least the reasons set forth above in reference to Claims 130 and 142.

With regard to Claims 148 and 149, Claims 148 and 149 depend from Claim 142 and ultimately from amended Claim 130 and thus incorporate the same limitations as amended Claim 130. Applicants respectfully that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests, for example, a unitary light module as called for in Claim 142 with the light emitting diode light emitting diode is thermally coupled to said heat sink, as called for in Claim 148, and further the light emitting diode being thermally coupled to the heat sink by a heat sink compound, as called for in Claim 149.

With respect to Claims 150 and 151, Claims 150 and 152 depend from amended Claim 130 and thus incorporate the same limitations as amended Claim 130. Applicants respectfully urge that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests the unitary light module as called for in the claims with the further combination of the output current to be at least about 250 milliamps ( Claim 150) and the output current to be at least about 350 milliamps (Claim 151).

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With respect to Claims 160-162, Claims 160-162 depend from Claim 252 and ultimately from Claim 130 and thus incorporate the same limitations as Claim 252 and amended Claim 130. Applicants respectfully urge that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests the unitary light module as called for in the claims with the further combination of the power resistor rated to dissipate at least about 2.5 watts of power (Claim 160), the power resistor rated to dissipate at least about 3.0 watts of power (Claim 161), or the power resistor rated to dissipate at least about 3.5 watts of power (Claim 162).

With respect to Claim 166, Claim 166 depends from Claim 130 and thus incorporates the same limitations as amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the accessory module assembly comprising a light assembly.

With respect to Claims 172, Claim 172 depends from Claim 251 and ultimately from amended Claim 130 and thus incorporates the same limitations as Claim 251 and amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims further in combination with the heat dissipation element comprising a heat sink/reflector for dissipating heat from the light emitting diode and for directing light from said light emitting diode.

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With respect to Claims 173 and 174, Claims 173 and 174 depend from Claim 172 and ultimately from amended Claim 130 and thus incorporate the same limitations as Claim 172 and amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims further in combination with the heat sink/reflector comprising a metal reflector having a high heat conductivity (Claim 173) and further wherein the metal reflector comprises a metal material chosen from copper, a copper alloy, aluminum, and brass (Claim 174).

With respect to Claim 175, Claim 175 depends from Claim 172 and ultimately from amended Claim 130 and thus incorporates the same limitations as Claim 172 and amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims further in combination with the heat sink/reflector configured to shape light emitted from said single high-current high-intensity power light emitting diode.

With respect to Claims 176 and 177, Claims 176 and 177 depend from Claim 166 and ultimately from amended Claim 130 and thus incorporate the same limitations as Claim 166 and amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims further in combination with the accessory module assembly including a heat

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dissipation element adapted to dissipate heat from the light emitting diode (Claim 176) or the accessory module assembly including a power resistor (Claim 177).

With respect to Claim 179, Claim 179 depends from Claim 176 and ultimately from amended Claim 130 and thus incorporates the same limitations as Claim 176 and amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims further in combination with the heat dissipation element comprising a heat sink/reflector for dissipating heat from the diode and for directing light from the diode.

With respect to Claims 180-182, Claims 180-182 depend from Claim 130 and thus incorporate the same limitations as amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the light emitting diode dissipating at least about one watt of power when operated (Claim 180), or the light emitting diode dissipating at least about 1.5 watts of power when operated (Claim 181), or the light emitting diode dissipates at least about 2 watts of power when operated (Claim 182).

With respect to Claims 183 and 184, Claim 183 and 184 depend from Claim 130 and thus incorporate the same limitations as amended Claim 130. Applicants respectfully submit that none of Bos, the NSUSRS Data Sheet, or Collins alone or in combination discloses or suggests a unitary light module as called for in the claims with the further combination of the interior portion comprising a header portion (Claim 183) or the interior portion comprising an interior rearview mirror assembly (Claim 184).



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Therefore, Applicants respectfully submit that Claims 130-133, 135-151, 153-164, 166-184, 251, and 252 are patentably distinguishable over Bos in view of NSUSRS Data Sheet or in view of Collins alone or in combination with any other reference of record.

In light of the above amendments and remarks, Applicants respectfully request reconsideration of the present application and a Notice of Allowance of all claims, namely Claims 130-133, 135-151, 153-164, 166-184, 251, and 252.

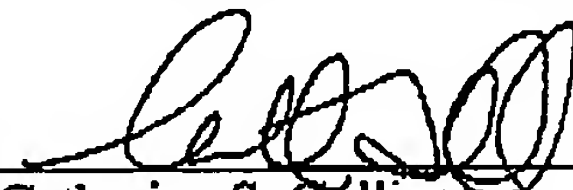
Should the Examiner have any questions or comments, the Examiner is invited to contact the undersigned at (616) 975-5506.

Respectfully submitted,

NIALL R. LYNAM ET AL.

By: Van Dyke, Gardner, Linn & Burkhardt, LLP

March 14, 2006  
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